

1 hospitals and health systems across the country to  
2 talk about their infrastructure needs among other  
3 issues, and of all the infrastructure needs that  
4 they thought of for healthcare broadband for rural  
5 areas really rose to the top.

6           So, we do have a lot of data that we'd  
7 be happy to share with you and we'll certainly put  
8 into the docket on how hospitals are using  
9 broadband including a very recent set of case  
10 examples. But, again, I know that the states and  
11 local governments have a role to play in sort of  
12 prioritizing broadband needs but cannot  
13 underestimate the role of the FCC in really being  
14 that resource because as you know government  
15 budgets at all levels are really quite strapped.

16           So, thank you for the opportunity to  
17 contribute to the conversation.

18           MS. ONYEIJE: Absolutely. Thank you so  
19 much, Chantal. I think as the conversation  
20 proceeds one thing we might ask you to address as  
21 this goes by is really how hospitals are using  
22 telehealth beyond the four walls of the facility.

1     You talked about lack of adequate broadband being  
2     a potential issue, and what we're trying to hone  
3     in on is broadband to whom and where. We heard  
4     Dr. Galpin talking earlier about making sure that  
5     veterans have broadband access at home so that  
6     they can get the kind of care that they need after  
7     serving our country. So, getting a sense from  
8     hospitals about the future of using broadband to  
9     care for patients in their homes, understanding  
10    how they're going to scale around remote  
11    monitoring, that kind of thing would be very  
12    useful. So, if I could ask you to think about  
13    that and then pipe back in later we'd appreciate  
14    that.

15               MS. WORZALA: Happy to do so.

16               MS. ONYEIJE: Carolyn, could you  
17    announce the next participant?

18               OPERATOR: We have Emily Moore,  
19    Association of State Health Officials. Please go  
20    ahead.

21               MS. MOORE: Thank you. Hi, everyone.  
22    My name is Emily Moore and I'm a senior analyst at

1 MS. ONYEIJE: Absolutely. Thank you so  
2 much, Emily. Suleima, can I ask you to just press  
3 \* and 1? And while you're doing that I know that  
4 there are various folks on the line from state and  
5 local government and health departments and we  
6 really would encourage you to give us any thoughts  
7 you have on this issue about reaching the areas  
8 that have the greatest critical needs. Also, I  
9 think we have on the line folks from Indian  
10 country and we would very much value those  
11 perspectives as well.

12 Suleima? I don't know, Emily, if your  
13 colleague is on the line.

14 MS. SALGADO: This is Suleima. Can you  
15 hear me?

16 MS. ONYEIJE: Perfect.

17 OPERATOR: Suleima Salgado from Georgia  
18 Department of Health.

19 MS. ONYEIJE: Hi, Suleima. Please go  
20 ahead.

21 MS. SALGADO: Thank you. And thank you,  
22 Emily, for allowing me to speak as well. Again,

1 I'm Suleima Salgado with the Georgia Department of  
2 Public Health. I run the Telehealth and  
3 Telemedicine Program for public health in the  
4 state of Georgia.

5 Just a little bit of background. We  
6 currently run a hub and spoke model from our state  
7 office down to our county health department. Our  
8 state is very decentralized when it comes to  
9 public health but we do have a great relationship  
10 with all of our 159 counties. All the 159  
11 counties have access to telehealth through our  
12 state telehealth program. We currently have more  
13 than 400 endpoints throughout the state of Georgia  
14 which are endpoints of anywhere we have telehealth  
15 equipment, so we provide a variety of services  
16 whether it just be used for telehealth  
17 videoconferencing, staff training, professional  
18 development. We use it more on the administrative  
19 side but we also use it to implement telemedicine  
20 programs such as behavioral health, a lot of  
21 pediatric services through our Children's Medical  
22 Service Program, also through our Women, Infant,

1 and Children Program. So, anything from pediatric  
2 complications for asthma, pulmonology, nephrology,  
3 pediatric neurosurgery, consultations, sickle  
4 cell, we have genetics clinics, infectious disease  
5 clinics that we do through our HIV Ryan White  
6 Program throughout the state. So, we have  
7 probably over different telemedicine programs that  
8 we run through our local county health department  
9 using broadband and telehealth.

10 As someone mentioned earlier, the access  
11 to broadband has been really significant for us  
12 and we're really appreciative of the funds that we  
13 are getting through the Rural Health Connect Fund.  
14 A majority of our program is funded with the  
15 rebates that we get through USAC. Our program  
16 probably cost us anywhere from \$2.3 to \$2.5  
17 million to run per year, and for state government  
18 that is a huge undertaking. Normally people don't  
19 have those kinds of budgets for telehealth  
20 especially in state governments. But with using  
21 broadband and having the benefits of FCC funding  
22 and the Rural Healthcare Connect Fund in the past

1 we've been able to get the rebate up to 90 percent  
2 on these circuits allowing us to justify in our  
3 legislative board to have it approve and  
4 understand the value of telehealth.

5 In the past couple of months it's been  
6 very difficult for us kind of just managing and  
7 budgeting and looking at where our needs are and  
8 our gaps to continue and sustain such a massive  
9 program if those funds were to be cut or limited.  
10 I know there's a lot of conversation right now  
11 given the fact that we've reached that \$400  
12 million cap so I just want to kind of consider  
13 that as an option.

14 Most of the districts and counties that  
15 we serve, a lot of people don't think of Georgia  
16 as having as many rural pockets. But I would be  
17 very comfortable to say that at least 50 to 60  
18 percent of our state is rural outside of the metro  
19 Atlanta area and we really struggle with even just  
20 getting broadband up and running in some of these  
21 communities. The cost associated with throwing  
22 dedicated T-1 lines of any sort in these

1 communities is very high cost for these county  
2 health departments so we are already working with  
3 very limited funding. We do use the old-fashioned  
4 hub and spoke model, we do run dedicated lines  
5 which a lot of other states and counties use, the  
6 existing broadband at AT&T and the wireless  
7 clouds, but in these rural counties they don't  
8 even have access to that.

9           So, again, really just realizing that  
10 while we are looking at innovative solutions for  
11 using broadband in some states and some counties  
12 you do have to use the old fashioned antiquated  
13 model of kind of how can you even just get  
14 broadband into some of these communities. That is  
15 a huge gap that we are continuously struggling  
16 with any time we kind of just got out there and  
17 put telehealth.

18           And we know that there is a need because  
19 there are physician shortages. We look at our  
20 Obstetrics Department and we know that 39 of our  
21 159 counties don't even have an OB/GYN in the  
22 state of Georgia. So, we use telehealth and

1       telemedicine to add value to those communities and  
2       bring those providers there. But when we get to a  
3       place where we're actually ready to build a  
4       sustainability plan we realize that the cost of  
5       the broadband to get it and to keep it up and  
6       running for a year contractor, you know, four  
7       years at a time is just way too high for a local  
8       municipality to undertake.

9               So, really I guess my request would be  
10       to just kind of really look at the cost of  
11       assessing this broadband and really knowing that  
12       there are still major areas that don't have access  
13       to broadband as a whole.

14              MS. ONYEIJE: Are there solutions that  
15       you would recommend, Suleima? You had put various  
16       things on the table here. You've certainly talked  
17       about the power of the technology and how you're  
18       leveraging that, but you've also talked about gaps  
19       and challenges and I'm curious about any solutions  
20       or recommendations that you might have for the FCC  
21       and other policymakers on the call.

22              MS. SALGADO: That's a great question.



1 I really think it would be prioritizing the need.  
2 So, when we look at the funds and when funds are  
3 released is really looking at the priority of how  
4 this money is being utilized. So, if the goal is  
5 access to rural areas of the state or rural areas  
6 who don't have specialty providers and bridging  
7 the gap when you look at diabetes. If there are  
8 certain initiatives that are kind of priority I  
9 think that should be considered when allocating  
10 funds. And I agree with everybody else, we've  
11 gotten really innovative as to how you can use it  
12 but, again, you're using it for rural and metro  
13 area who probably already have access to some  
14 provider.

15 So I really think prioritization should  
16 be kind of key and put in the forefront when  
17 looking at how these funds should be spent and  
18 really looking at the gap. So, if people can give  
19 you a case and say, well, justify why you feel you  
20 need broadband and why you should receive the  
21 rebate or whatever first, I think that would also  
22 kind of help weed out those extra organizations

1       who may not be using it to its maximum capacity.

2               MS. ONYEIJE: Now, that's very  
3       interesting. I'm struck by your comment about the  
4       39 counties that do not have an obstetrician, if I  
5       heard you correctly.

6               MS. SALGADO: Yes, that is correct.

7               MS. ONYEIJE: I am curious, you talk  
8       about the prioritizing about needs. Is the Health  
9       Department in Georgia doing that, and if so how?  
10      How are you -- everyone has some need, and I'm  
11      curious if you have found a way to sort of slice  
12      and dice this within your state to figure out,  
13      okay, who has the most critical needs for  
14      telehealth services and here's how we're going to  
15      parcel out our time and resources.

16              MS. SALGADO: Yeah, we really in public  
17      health have looked at not only social determinants  
18      of health but population health as a whole so we  
19      look at heatmaps throughout our state. We look at  
20      telehealth and telemedicine as a way to add value  
21      or to bring services to counties where there  
22      aren't any available. So we really rely on our

1     heatmaps and our Medicaid data and our provider  
2     data that we get from Medicaid to really notice  
3     where those target populations are.

4             So, if a county comes to us and says,  
5     hey, we'd like to use telehealth, can public  
6     health help us? Or can our local Georgia  
7     partnership with telehealth help us? We really  
8     look at those heatmaps and say, okay, what are you  
9     considering doing? I'll use cancer as a perfect  
10    example. We launched a tele-dermatology program  
11    in South Georgia because we looked at the heatmaps  
12    and the data that came from Medicaid and Medicare  
13    and said most of the cancer is coming from  
14    southeast Georgia. Well, what's going on in  
15    southeast Georgia? Well, there are a lot of  
16    outdoor farm workers, day laborers, linesmen, that  
17    work in that cluster of the state. Okay. Do they  
18    have providers, yes or no? The number of  
19    providers available? And then we cross that with  
20    Medicaid data and look at those numbers and then  
21    determine where those populations were in those  
22    pockets. Then we said, okay, providers in the

1 community, is there a cancer provider in this  
2 area? No. Okay, so here's where we need to be.

3 So, really looking at your public health  
4 data and using the existing resources to determine  
5 what the needs are is pretty much how we determine  
6 our expansion model and our services.

7 MS. ONYEIJE: That's very helpful. Do  
8 you happen to know whether there is a regional  
9 plan that's similar to what you're describing?

10 MS. SALGADO: So, we work with the  
11 Southeast Telehealth Resource Center that's  
12 actually based out of Georgia, but I believe they  
13 cover Florida, Georgia, Alabama, and South  
14 Carolina. So, we have been partnering with them  
15 to look at the data to see kind of where we're  
16 going. But since we are specifically focused  
17 through public health in Georgia that's kind of  
18 been our target. But we do look out to them and  
19 ask them for resources.

20 MS. ONYEIJE: Thank you so much,  
21 Suleima. We really appreciate it.

22 I think I want to put one additional

1 issue on the table at this point and solicit  
2 thoughts generally from the group. I think  
3 Suleima talks a lot about funding and maybe we  
4 should shift to that for a few minutes. Again,  
5 just remember you press \*1 on your phone to join  
6 the conversation at any time.

7           So, here is the question I would throw  
8 out in part based on what I just heard, how are  
9 telehealth networks being funded in your  
10 communities or nearby communities? Is the  
11 funding, like Georgia, primarily federal, is there  
12 state funding available, private funding,  
13 philanthropy? And if I could ask some normative  
14 questions too. Do you believe that we are funding  
15 the right things in rural telehealth? Obviously  
16 some participants have talked about funding  
17 connectivity for healthcare facilities and others  
18 have talked about needing connectivity to patient  
19 and consumer homes. Are we funding the right  
20 thing? What are we doing now and is it the right  
21 thing?

22           And then another strand I think we'd

1     like to ask you to address is we've heard from  
2     rural and underserved communities that sometimes  
3     it's not easy to access the various streams of  
4     funding available. The Task Force has had  
5     numerous stakeholders especially from rural and  
6     underserved areas tell us about challenges that  
7     they face in navigating what they have called a  
8     patchwork of federal and state funding.

9                 So, your thoughts on whether there are  
10    ways for federal and state government to better  
11    coordinate around telehealth funding, just to make  
12    it easier for communities many of whom Suleima was  
13    referencing to better access the needed support.  
14    If we have thoughts on any of those questions  
15    please press \* and 1 on your phone.

16                I will tell you that I'm watching the  
17    time here, but I do think the funding question is  
18    an important one. So, I don't want us to move  
19    forward until we've had a chance to talk about  
20    that a little bit. I'm sorry folks, we are having  
21    some technical difficulties on this end. Would it  
22    make sense... Ben -- can you hear me still?

1 Suleima just mentioned about working with the  
2 Telehealth Resource Center in Georgia which, yes,  
3 does cover a number of states. That's just one of  
4 14 telehealth resource centers that our office  
5 funds. I think many people on the call are quite  
6 aware of telehealth resource centers, but the  
7 kinds of things that they're doing in Georgia  
8 could absolutely be emulated by a lot of states.  
9 And I can say a little bit from my past history of  
10 15 years with the Universal Service Program, not  
11 all states are coming close to taking advantage of  
12 the resources available as I do know Georgia is.

13 But way beyond that, and I will comment  
14 that our office provides a variety of grants for  
15 telehealth and one thing we don't focus very much  
16 on is connectivity because from our perspective  
17 the Commission is doing a great job with the  
18 Universal Service Program so we're not focused on  
19 that. But reimbursement and cost are extremely  
20 important issues, how to get money to buy  
21 equipment and all sorts of other activities. All  
22 I will say on that is look at our telehealth

1 resource centers which cover every state in the  
2 country and territories, they are our local  
3 experts, our regional experts. They can help  
4 point you to sources of funding and have all sorts  
5 of training modules.

6 I recently heard from someone that they  
7 didn't know how to find what government resources  
8 were available for telehealth which was a little  
9 bit surprising given where that question was  
10 coming from. Grants.gov every week publishes new  
11 funding opportunities and simply searching for  
12 telehealth there's a number of things being  
13 published. We can't really talk about 2018  
14 because we don't have a budget yet, but when we do  
15 there will be plenty of telehealth opportunities.  
16 And it is a lot of work for small health care  
17 providers to keep track of that, but for instance,  
18 states could be notifying all of its constituents  
19 that grants.gov has some telehealth opportunities  
20 coming up.

21 MS. ONYEIJE: That's great. Can I ask  
22 you to comment on the -- I know you run



1 competitive grants at HRSA where many of them.  
2 Can you talk a little bit to the suggestion that  
3 came from Georgia about funding programs,  
4 prioritizing the needs based on heatmaps and other  
5 things?

6 MR. ENGLAND: Well, again, commenting a  
7 little bit on sort of my past experience, Georgia  
8 noted that they're using a lot of T-1 lines and I  
9 think that is probably true for a lot of the  
10 bricks and mortar facilities. It doesn't  
11 obviously touch the broadband 4G, 5G type stuff,  
12 the direct to consumers, but that happens to be  
13 sort of a sweet spot in the Universal Service  
14 Program that makes it more cost effective than  
15 maybe some other services.

16 But, unfortunately, since the Fund  
17 that's being referred to has hit its cap the  
18 question is some needs are higher than others and  
19 there could be a reason to prioritize. Obviously  
20 I'm a little biased because I'm in the Office of  
21 Rural Health Policy so our focus is very much on  
22 rural and our funding authorization safety net

1     which means we're focused on safety net providers.  
2     So, we obviously would think those are the most  
3     critical needs that have been identified. Sure, I  
4     can certainly see -- if there's not enough money  
5     to go around then prioritization based on need  
6     seems to make a lot of sense.

7                 MS. ONYEIJE: Fair enough. So, Bill,  
8     I'm going to keep you on the line for a minute  
9     because I do think it would be useful to move to  
10    our second theme here because I fear we're running  
11    out of time. In addition to solutions what are  
12    the issues that FCC policymakers and other  
13    policymakers at the federal, state, local, tribal  
14    sort of levels that we need to be keeping top of  
15    mind here and staying ahead of? It's critically  
16    important for us; in fact, it's part of the charge  
17    of the Task Force to help position the Commission  
18    to stay ahead of the broadband health curve. One  
19    concern we have obviously is sort of potentially  
20    unintended effects of leaving folks behind as  
21    connected health becomes more common and the gaps  
22    between connected communities and isolated

1 communities become more apparent.

2 If you have any thoughts on what those  
3 emerging issues might be I would ask you to share  
4 that. And anyone else who has either solutions or  
5 issues to share just, again, press \*1 and you can  
6 join our conversation.

7 MR. BARTOLOME: Karen, I think I'd like  
8 to specifically ask Eric Frederick with Connected  
9 Nation, if he's on the phone, if he has any  
10 thoughts on the theme that you just mentioned. I  
11 think that would be helpful.

12 MS. ONYEIJE: Eric, could you press \*1,  
13 and then Carolyn, can you announce Eric?

14 OPERATOR: Eric is on the line from  
15 Connected Nation. Please go ahead.

16 MS. ONYEIJE: Hi, Eric. How are you?

17 MR. FREDERICK: Good. How are you? Can  
18 you hear me okay?

19 MS. ONYEIJE: Yes.

20 MR. BARTOLOME: Yes, we can, thank you.

21 MR. FREDERICK: All right, great. As  
22 you know, I'm the Community Affairs Director for

1 Connected Nation. We've been mapping and  
2 researching and doing community planning around  
3 broadband access, adoption, and use for more than  
4 a decade now, and we're big participants in the  
5 SBI Program that NTIA ran.

6 I think on this topic being able to  
7 better identify unserved and underserved areas for  
8 broadband access and adoption is absolutely  
9 critical. When we switched from NTIA maintaining  
10 the national broadband map to the FCC's Form 477  
11 data there was a lot of publicly available  
12 information, or publicly acceptable information  
13 that was lost in being able to examine underserved  
14 areas.

15 So, I think improving the scale of  
16 mapping availability data so that we can get a  
17 little bit more surgical in the areas that we  
18 identify as being unserved by broadband, not only  
19 for the infrastructure access itself but also for  
20 adoption. I think we've come to a point where  
21 we've gone as far as we can with the data that  
22 we've collected in making general assumptions

1     about who is underserved both geographically and  
2     socioeconomically, and I think we need to get more  
3     surgical with it.

4             Through our Community Planning Program  
5     that we operate at Connected Nation we've been  
6     doing very detailed surveys in communities across  
7     rural parts of the country in Michigan, and Ohio,  
8     South Carolina, Iowa, and other places where we've  
9     been asking about healthcare use among residents  
10    and sometimes those patterns that we find there  
11    don't mirror those at the national level. So, I  
12    think being able to better diagnose what areas are  
13    underserved by broadband access and adoption as  
14    well as being more surgical in how we examine the  
15    local community issues will ultimately end up  
16    getting more folks connected in leveraging  
17    broadband connection for telehealth applications.

18            MR. BARTOLOME: That's great. Eric, I  
19    was wondering, you do a lot of work obviously with  
20    communities as part of your organization helping  
21    to ensure that broadband is available and adopted  
22    in the various communities and states. I was

1       wondering, do you think it's more effective for  
2       folks like in your organization trying to educate  
3       and inform folks on the ground about the value of  
4       broadband and particularly broadband health, or do  
5       you see a role at the federal level that can be  
6       effective in trying to motivate and persuade folks  
7       on the ground about the value of broadband health  
8       technologies?

9               MR. FREDERICK: That's a good question.  
10       I think the answer is there is a role for both.  
11       But because we've been working with communities  
12       for so long I've found that local community action  
13       and support is where the most work gets done.  
14       Being able to take information from a federal  
15       level and translating that to locals it works  
16       okay, but when you start making it personal to the  
17       community that you're working in or gathering very  
18       hyper-local data for that particular community it  
19       suddenly makes it more real so that you're not  
20       applying national generalities to a rural county  
21       in the middle of northern Michigan, for example.  
22       If you can gather information from them and bring

1 local stakeholders to the table like the  
2 healthcare providers, public health agencies,  
3 residences, businesses and the like to the table  
4 it starts to make it a lot more real.

5 So, I think taking federal guidelines  
6 and federal best practices and advice that have  
7 been gathered from across the country is good but  
8 ultimately where the work gets done is translating  
9 that to the local level and making it very  
10 personal so that communities can develop solutions  
11 that work for them since every community is  
12 different.

13 MR. BARTOLOME: Thanks, Eric. Karen, do  
14 you have any questions? Otherwise we should see  
15 who is next in queue.

16 MS. ONYEIJE: Absolutely. Thank you,  
17 Eric. We appreciate that. Carolyn, would you  
18 announce the next participant please?

19 OPERATOR: Yes. We do have Maria Givens  
20 from National Congress of American Indians.  
21 Please go ahead.

22 MS. ONYEIJE: Hi, Maria, how are you?

1 MS. GIVENS: Hi, good, thank you. This  
2 call has been really informative. I work at the  
3 National Congress of American Indians where we  
4 advocate for the 567 tribes in the United States.  
5 As most of you guys probably know, tribal lands  
6 are the most unserved areas in the country for  
7 broadband. Coupling with that the federal  
8 government's trust responsibility to provide  
9 medical services and healthcare to Indian people  
10 we really see a really good opportunity here with  
11 telehealth solutions.

12 So, we know that the Indian Health  
13 Service has been working on this issue through  
14 their Telebehavioral Health Center for Excellence,  
15 and that started in 2009 and it's been growing  
16 ever since then. We're just hoping that the FCC  
17 and this Task Force can work together with the  
18 Indian Health Service to bridge this divide  
19 because what we're seeing with our communities is  
20 that, as time goes by, there are more communities  
21 that feel even less connected in all facets of  
22 life, especially with health.



1           In Indian Health Service, as some of you  
2           probably know, the biggest problem is recruiting  
3           and retaining qualified professionals, and  
4           telehealth is a way that we can really solve that  
5           problem, solve the problem for IHS and HHS. This  
6           is a way that the FCC through coordinated efforts  
7           could really help solve that issue.

8           So, if anyone on the line wants to get  
9           in touch with NCAI later about all of this we have  
10          a website, [ncai.org](http://ncai.org), and we can definitely help to  
11          point you in the right direction for anything  
12          tribal telecom or tribal anything. I just wanted  
13          to thank you guys for letting me speak here on  
14          this call and also just let the Task Force know  
15          that Indian country is really interested in this,  
16          we really see a whole lot of potential here, and  
17          we definitely don't want you guys to forget about  
18          Indian country as you move forward on this.

19          MR. BARTOLOME: Absolutely not, Maria.  
20          Actually, while I have you on the phone if I could  
21          just ask a quick question. You mentioned one of  
22          the issues is retention of professionals in Indian

1 country, and I don't know if this is a question  
2 you can answer or if it's better directed to the  
3 Indian health services at another time, but we're  
4 hearing certainly that as you know in rural areas  
5 the availability and adoption of broadband-enabled  
6 health technology and solutions, such as  
7 telehealth and telemedicine, are affected by a  
8 variety of different issues and factors like the  
9 lack of access to broadband networks, certainly  
10 capital resources, hospitals closures  
11 unfortunately... [and] you mentioned retention of  
12 professionals like physicians. Are those the same  
13 issues that are also extant in Indian country or  
14 are there any unique issues in Indian country that  
15 we should be acutely aware of in trying to close  
16 the divide there?

17 MS. GIVENS: I would say that all of  
18 those issues that impact rural communities acutely  
19 impact Indian country. Then I think the other  
20 piece of this puzzle is that there is a federal  
21 trust responsibility to provide healthcare to  
22 Indian people. So, it's a little bit different

1       than the health system of the rest of the country,  
2       but there is a federal responsibility to make  
3       these systems work. It's no secret that there is  
4       room for improvement at IHS. We think this is a  
5       really cool, interesting way to number one bring  
6       broadband to communities but also to help fulfill  
7       that trust responsibility.

8               MR. BARTOLOME: Okay. Thank you very  
9       much.

10              MS. ONYEIJE: Thank you so much, Maria.  
11       I'm going to ask if Patty and Kevin and Maureen  
12       would mind pressing \*1 here. We wanted to get  
13       your views on these emerging issues question just  
14       from your unique perspectives. Patty, for  
15       example, you were talking a little bit about what  
16       I would call future proofing issues right at the  
17       top of the hour. And I'm curious just from each  
18       of you, what emerging issues are you seeing from  
19       your perches?

20              So, Patty, are you on the line?

21              OPERATOR: One moment while the lines  
22       are opened.

1 DR. MECHAEAL: This is Patty again. I  
2 think from our perspective at the Personal  
3 Connected Health Alliance some of the emerging  
4 issues that we're seeing are really around  
5 interoperability and the ability to evenly move  
6 data from various systems. So, when you're  
7 talking about telehealth and now you're  
8 introducing remote patient monitoring, and  
9 increasingly people want to have their wearable  
10 data integrated into their electronic health  
11 record and integrated into clinical practice, what  
12 we're finding is that making sure that there are  
13 clear guidelines and architectures out there that  
14 can facilitate safe, secure data exchange between  
15 different sources of information.

16 So, that's a real big area that we're  
17 seeing coming up, especially if you start to think  
18 about like the internet of things where everybody  
19 wants everything everywhere they go and they want  
20 all of their data in one place which from a health  
21 outcomes perspective is going to be really, really  
22 critical as well. So, having as much information

1 up to date in the hands of individuals themselves  
2 as well as their providers is mission-critical.

3 And then the other one is really around  
4 -- and somebody alluded to this before --  
5 reimbursement and what actually gets covered and  
6 what gets paid for. We are moving into a virtual  
7 world in which health-related interactions  
8 increasingly are happening very differently than  
9 they had in some of the traditional models. So,  
10 making sure that the financing and the ability to  
11 make sure that healthcare providers are getting  
12 paid for the services that they're providing  
13 irrespective of where they're located, but also  
14 dealing with issues around jurisdiction. So, can  
15 a healthcare provider who is board certified in  
16 one jurisdiction provide teleconsultations and  
17 health services in another one.

18 MS. ONYEIJE: That's fascinating. You  
19 mentioned IOT, so I am curious about whether the  
20 widespread adoption of things like remote patient  
21 monitoring -- I think that Dr. Galpin was talking  
22 about the 2000-fold increase that he anticipates

1 in the veterans' space. For things like remote  
2 patient monitoring and IOT solutions do you  
3 anticipate or do you see ways in which the kind of  
4 connectivity that's necessary for all the  
5 participants at facilities, patients and  
6 caregivers, will change? I think that there are  
7 some folks who have been saying that we do need to  
8 start thinking about more episodic access to  
9 connectivity to address this kind of care  
10 delivery, but I'm curious about your views.

11 DR. MECHAEAL: I think universal access  
12 is an important issue in the same way that --  
13 universal access to broadband is important  
14 alongside universal access to healthcare and  
15 health services. I think those two go very much  
16 hand in hand. I think we need to do better  
17 assessments of the types of broadband connectivity  
18 that are going to be needed in a world where more  
19 and more interactions are requiring higher  
20 bandwidth and really make informed decisions about  
21 where to invest resources and how to invest those  
22 resources.

1           So, remote patient monitoring,  
2           synchronous teleconsultations, these are  
3           increasingly bandwidth-intensive and so if we're  
4           moving into a world where we're doing continuous  
5           monitoring, which is the recommendation in some  
6           healthcare situations, and moving care into the  
7           homes I think that's going to require a whole  
8           other conversation around bandwidth.

9           MS. ONYEIJE: Very interesting. So, I'm  
10          going to pull Kevin back into the conversation  
11          here. Are there emerging issues that you are  
12          seeing in the veterans' space or that you're  
13          observing more generally across the country?

14          DR. GALPIN: I think going back to just  
15          into the home that's where we are, and I think the  
16          universal ability to have broadband connectivity  
17          in some form is what we're really looking to as  
18          the next goal.

19          One issue that I don't know if I'm  
20          seeing it specifically but I think we all know is  
21          an issue is just the idea of clinical capacity. I  
22          mean, are there enough providers out there, are we

1     going to see a lot of providers retiring and not  
2     being replaced as quickly? Do we have the work  
3     force? I think this is another area where having  
4     broadband universally available makes a  
5     difference. Through telehealth, we strongly  
6     believe we can expand the workforce because as  
7     people retire part of the reason they want to  
8     retire is they want to move to a new location,  
9     maybe closer to family or out of a big city where  
10    there's hustle and bustle. We want to be able to  
11    connect to where the providers are too. So, there  
12    are providers that move out to rural communities,  
13    they want to live at a lake house and go fishing,  
14    and we want to give them an opportunity to  
15    maintain work in the medical sector and broadband  
16    in rural areas is a way to capture that piece of  
17    the workforce and hopefully expand the entire  
18    clinical workforce.

19                So, I think the concept of do we have  
20    enough providers to manage all the care that we're  
21    going to need to have and how do we extend our  
22    providers, how do we expand that workforce, and



1 MS. LEWIS: I am.

2 MS. ONYEIJE: -- but if you have any  
3 thoughts on emerging issues, whether on the data  
4 side or elsewhere please.

5 MS. LEWIS: I did just want to mention  
6 that our 2015 survey data revealed something  
7 interesting about multiple device users versus  
8 those who just use a single device to connect to  
9 the internet. We are finding that people who have  
10 multiple connections either using personal  
11 computers, tablets, smartphones, tend to conduct  
12 more activities online including engaging in  
13 health-related activities. So, for example,  
14 single device users with smartphones were less  
15 likely to seek health information online than  
16 personal computer only users.

17 So, I know that a number of underserved  
18 communities tend to over-index on the use of  
19 smartphones. I just want us to sort of be aware  
20 that this is just one data point from one year,  
21 and our 2017 survey may shed more light on this,  
22 but we may want to be sensitive to how people are

1     accessing the internet based on the devices that  
2     they're using. And I know that as we've talked  
3     today there is a lot being delivered through  
4     smartphone technology but we want to also make  
5     sure that, as we are looking to smartphones as a  
6     way to deliver more connectivity, that we're  
7     perhaps relying on it appropriately and not  
8     overemphasizing its utility. It's important but  
9     we'll kind of see where the data go in future  
10    years, but we're kind of tracking this closely.

11           MS. ONYEIJE: That is a very good point.  
12    It comes back to that question of not only the  
13    quality but the kind of connectivity that will  
14    really be needed to allow consumers in rural and  
15    underserved areas and beyond to sort of  
16    participate in the connected care future that  
17    Patty and others have been talking about.

18           I knew this was going to happen. We  
19    wanted to make sure that we were respectful of  
20    your time. But before we close the session --  
21    because we're right at 3:00 now -- we did want to  
22    just open this up to anyone else who wanted to put

1 any other comment or give any other input just  
2 press \*1 and we will recognize you. We at the  
3 Task Force are certainly willing to stay a little  
4 bit over if needed.

5 If you would prefer to reach out to us  
6 separately we are happy to engage with you  
7 offline. That is also another core element of the  
8 Task Force's sort of objectives and our charge is  
9 to have as broad an outreach to stakeholders  
10 across the country as possible.

11 So, we completely understand if folks  
12 need to go. We know what we're on various time  
13 zones here so we appreciate that. Carolyn, please  
14 let me know, I think folks are probably going to  
15 reserve their additional comments. I can't quite  
16 see any more whether there are folks in the queue  
17 or not.

18 OPERATOR: There are no commenters in  
19 the queue at this time.

20 MS. ONYEIJE: Thank you. So, what I'd  
21 like to do then is to thank you for participating  
22 today. This was really an outstanding session and

1       it's given us a lot of food for thought. We  
2       greatly appreciate the input that you provided.

3               There are so many things I could  
4       highlight here and there are a few that stand out.  
5       I heard over and over broadband as an enabler, the  
6       drive to move broadband and health from healthcare  
7       facilities to the home, that there really is a  
8       compelling case for telehealth and we just need to  
9       figure out how to make sure that people are not  
10      being left behind, to some of the questions about  
11      relevance and the fact that health may be a use  
12      case that addresses that relevance question, to  
13      the issue of physician shortages and broadband as  
14      a force multiplier.

15             So, I just want to thank everyone again  
16      for their thoughtful input. If you have  
17      additional comments you want us to consider please  
18      reach out to us at [connect2health@fcc.gov](mailto:connect2health@fcc.gov) or  
19      submit more formal comments.

20             There is a wealth of information on the  
21      FCC's broadband health hub for those who have not  
22      been following our work which is [fcc.gov/health](http://fcc.gov/health).

1     So, for example, the critical need counties that I  
2     was talking about earlier -- those are on there --  
3     the Mapping Broadband Health in America Platform  
4     is available there.

5             And I just want to wish everyone a  
6     wonderful afternoon and thank you again for your  
7     participation. Carolyn, would you please make  
8     final announcements and conclude the session?

9             OPERATOR: Thank you. Ladies and  
10    gentlemen, that does conclude your conference for  
11    today. Thank you for our participation and for  
12    using AT&T Executive Teleconference Services. You  
13    may now disconnect.

14

15             (Whereupon, at 3:04 p.m. the  
16    PROCEEDINGS were adjourned.)

17             \* \* \* \* \*

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## 1 CERTIFICATE OF NOTARY PUBLIC

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